## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method[[,]] comprising:

requesting access to a resource for a first process, the first process having a corresponding first semaphore;

determining whether the resource is being accessed by a second process, the second process having a corresponding second semaphore; and

denying the first process access to the resource if the resource is being accessed by the second process as indicated by a lock on the resource, wherein the lock is indicated at the second semaphore.

- (Previously Presented) The method of claim 1, further comprising the first process
  having a corresponding first local priority and the second process having a
  corresponding second local priority.
- 3. (Previously Presented) The method of claim 1, further comprising:

granting the first process access to the resource if the resource is not being accessed by the second process as indicated at the second semaphore.

Claims 4-23 (Cancelled)

24. (Currently Amended) A machine-readable medium, the machine-readable medium selected from the group consisting of a floppy diskette, an optical disk, a Compact Disc-Read Only Memory, a magneto-optical disk, a Read Only

Attorney Docket No.: 42390P12312 Application No.: 10/045,414 Memory, a Random Access Memory, an Erasable Programmable Read Only

Memory, an Electromagnetic Erasable Programmable Read Only Memory, a

magnetic card, an optical card, and a flash memory, the machine-readable

medium having stored thereon data representing sets of instructions which, when executed by a machine, cause the machine to:

request access to a resource for a first process, the first process having a corresponding first semaphore;

determine whether the resource is being accessed by a second process, the second process having a corresponding second semaphore; and

deny the first process access to the resource if the resource is being accessed by the second process as indicated by a lock on the resource, wherein the lock is indicated at the second semaphore.

- 25. (Previously Presented) The machine-readable medium of claim 24, further comprising the first process having a corresponding first local priority and the second process having a corresponding second local priority.
- 26. (Previously Presented) The machine-readable medium of claim 24, wherein the sets of instruction which, when executed by the machine, further cause the machine to:

grant the first process access to the resource if the resource is not being accessed by the second process as indicated at the second semaphore.

27. (Currently Amended) An apparatus[[,]] comprising:

a central processing unit having a processor to execute a plurality of processes including a first process and a second process; and

Attorney Docket No.: 42390P12312 Application No.: 10/045,414 the processor is further to

request access to a resource for the first process, the first process having a

corresponding first semaphore;

determine whether the resource is being accessed by the second process, the

second process having a corresponding second semaphore; and

deny the first process access to the resource if the resource is being accessed by

the second process as indicated by a lock on the resource, wherein the lock is

indicated at the second semaphore.

28. (Previously Presented) The apparatus of claim 27, further comprising the first

process having a corresponding first local priority and the second process having

a corresponding second local priority.

29. (Previously Presented) The apparatus of claim 27, wherein the processor is further

to grant the first process access to the resource if the resource is not being

accessed by the second process as indicated at the second semaphore.

Claims 30-32 (Cancelled)

33. (Previously Presented) The method of claim 2, further comprising:

determining if access to the resource is simultaneously being requested by the

second process; and

granting access to the resource to one of the first process and the second process

having a higher local priority of the first local priority and the second local

priority.

Attorney Docket No.: 42390P12312

Application No.: 10/045,414

4

34. (Previously Presented) The machine-readable medium of claim 25, wherein the sets of instructions which, when executed by the machine, further cause the machine to:

determine if access to the resource is simultaneously being requested by the second process; and

grant access to the resource to one of the first process and the second process having a higher local priority of the first local priority and the second local priority.

35. (Previously Presented) The apparatus of claim 28, wherein the processor is further to:

determine if access to the resource is simultaneously being requested by the second process; and

grant access to the resource to one of the first process and the second process having a higher local priority of the first local priority and the second local priority.

36. (Currently Amended) A system[[,]] comprising:

a memory having a plurality of resources being accessed by a plurality of processes, and a plurality of semaphores associated with the plurality of processes; and

a processor coupled with the memory, wherein the processor is capable of executing the plurality of processes, the processor is further to

Attorney Docket No.: 42390P12312 Application No.: 10/045,414 request access to a resource for a first process of the plurality of processes, the

first process having a corresponding first semaphore of the plurality of

semaphores;

determine whether the resource is being accessed by a second process of the

plurality of processes, the second process having a corresponding second

semaphore of the plurality of semaphores; and

deny the first process access to the resource if the resource is being accessed by

the second process as indicated by a lock on the resource, wherein the lock is

indicated at the second semaphore.

37. (Previously Presented) The system of claim 36, further comprising the first

process having a corresponding first local priority and the second process having

a corresponding second local priority.

38. (Previously Presented) The system of claim 36, wherein the processor is further to

grant the first process access to the resource if the resource is not being accessed

by the second process as indicated at the second semaphore.

39. (Previously Presented) The system of claim 37, wherein the processor is further

to:

determine if access to the resource is simultaneously being requested by the

6

second process; and

grant access to the resource to one of the first process and the second process

having a higher local priority of the first local priority and the second local

priority.

Attorney Docket No.: 42390P12312

Application No.: 10/045,414